Appendix B

Environmental Appendix to the Engineer Annex

The following annex format lists typical environmental considerations for OPLAN, CONPLAN, OPORD and execution. For small units (battalions and companies), the format will provide a guide for finding necessary information for developing their own orders. For larger units (brigade and divisional), the format should provide an example for developing a similar appendix. This format conforms to FM 101-5 and is an example of Appendix 2 (Environmental Considerations) to Annex F (Engineer). FM 101-5 directs that OPLANs/OPORDs/CONPLANs will contain an appendix to address environmental considerations. Each service uses its own format for similar appendixes/annexes. Annex L (Environmental Considerations) to a JOPES OPLAN/OPORD/CONPLAN is the parallel document for a joint staff.

The considerations and level of detail in this format are appropriate for corps, divisions, and, on some occasions, regiments/brigades. Unit planning at the regiment or brigade level and below will normally include only those elements required by the higher HQ order or plan and not included in a unit SOP.

Unit orders and plans follow individual service formatting conventions. Army orders normally include environmental considerations in the coordinating instructions (paragraph 3, Execution) if not in a separate appendix. When specific command procedures dictate, staff officers include some environmental considerations in logistics and medical annexes.

All operations comply with federal law to the extent possible. This example assumes an overseas deployment in which the vast majority of federal environmental law is not applicable. Plans for training or operations in the US must conform to federal and state laws.

Tab A of this example appendix implements the requirement of EO 12114 to conduct environmental assessments before taking actions that significantly harm the environment of a foreign nation or the global commons. It is applicable during certain support operations and stability operations. Actions taken during combat are excluded. DODD 6050.7, which implements EO 12114, defines the EIS, ES, and ER directed in this tab.

CLASSIFICATION

Copy ___ of ___ copies
Issuing Headquarters
Place of Issue
Date-Time Group of Signature
Message Reference Number

APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54th MECH DIV OPLAN 99-7 (U)

References:

a. JP 3-34, "Engineer Doctrine for Joint Operations," November 1997.

b. JP 4-04, "Joint Doctrine for Civil Engineer Support," 26 September 1995.

c. JSI 3820.01A, "Environmental Engineering Effects of DODA," 16 January 1996.

d. DODI 4715.5, "Management of Environmental Compliance at Overseas Installations," 22 April 1996.

e. DODI 4715.8, "Environmental Remediation Policy for DOD Activities Overseas."

f. Applicable country-specific FGS.

g. DOD OEBGD, or in-theater equivalent, October 1992.

h. HN agreements, local operating standards if different from FGS, command special instructions, SOPs, policies, guidance for environmental considerations, or references pertaining to significant environmental factors in the AO.

i. Unit SOPs.

Time Zone Used Throughout the Order:

1. SITUATION.

a. Enemy forces. Refer to an OPORD or to an environmental annex/appendix to an OPORD. State any environmental factors or conditions which could adversely affect the successful completion of the mission, and/or the health or welfare of friendly forces and the indigenous population. Environmental threats can be natural, collateral, accidental, or caused by actions of the population or enemy forces. (*This operation depends upon our ability to provide water for both our forces and the indigenous population through desalinization plants drawing water from the Gulf…the enemy has large amounts of chemical munitions. Special care must be taken when destroying enemy munition dumps to ensure chemical munitions are not being detonated…due to the extremely high water table in the area, special care and considerations must be taken in the siting of landfills and the collection of all waste products…)*

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

(1) Terrain. List all critical terrain aspects that impact functional areas operations.

(2) Weather. List all critical weather aspects that impact functional areas operations.

(3) Enemy functional area capability and/or activity:

(a) List known and templated significant environmental hazards. If the information is large and specific enough, this list may become an overlay.

(b) List significant enemy capabilities to use environmental manipulation as a means to impede friendly forces or jeopardize long-term objectives. (*Enemy may release oil directly into the Gulf…Enemy may set oil wells afire to cover their retreat…)*

(c) State the expected employment of enemy functional area assets based on the most probable course of action. *(Enemy will not be effected by international opinion…they will use all means at their disposal to include releasing oil directly into the gulf and setting oil wells afire in an orgy of destruction…)*

(4) Limiting factors. Outline limitations that are due to lack of foreign access, time, operations security (OPSEC), HN rules or sensitivities, public affairs (foreign and domestic), legal considerations, and resources. *(Operations by 54th MECH DIV will inherently have an environmental impact. Environmental considerations require early integration in the planning process and will be accomplished in conjunction with other planning and the risk management process. The environmental protection level will vary as levels of risk are anticipated to be lower and the correspondingly environmental efforts more comprehensive in proportion to the distance from the combat zone [CZ]. This appendix does not address munitions storage/disposal, chemical, biological, and radiological [CBR] activities, or activities on naval ships at sea.)*

b. Friendly forces. Refer to an OPORD or to an annex to an OPORD. State the concept of environmental operations for the higher headquarters. This concept covers relationships between environmental considerations and the supported OPORD, OPLAN, CONPLAN, or support plan.

c. Attachments and detachments. Refer to an OPORD or an annex to an OPORD (Annex L if it is a JOPES OPORD). Identify special environmental teams or personnel.

2. MISSION. State the commander's concept for environmental actions. This concept answers the who, what, when where, how, and why of the relationship between environmental considerations and the supported OPORD, OPLAN, CONPLAN, or functional plan. Normally, the mission will be to protect, as much as practicable, the health and welfare of US personnel and the indigenous population from environmental threats during the conduct of the operation; to reduce long-term, adverse impact on the economy and public health; and to reduce US costs and liabilities at the completion of the operation.

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

3. EXECUTION.

a. Scheme of Environmental Operations. Summarize the commander's concept of environmental actions required to support the OPLAN, OPORD, or CONPLAN. Identify issues and actions that should be addressed during all phases of the operation. Identify the desired environmental endstate.

(1) Operational effect on the environment. List critical resources that should be protected during the operation such as forests, croplands, or water- and sewage-treatment facilities. Describe factors to be considered by subordinate unit commanders when making collateral damage decisions.

(2) Environmental resource effect on the operation. List any environmental conditions or factors that could impede successful completion of the operational mission or jeopardize the desired endstate. Identify possible targets of environmental sabotage or terrorism.

(3) Compliance requirements. State regulatory, legal, and HN compliance requirements that will apply and under what conditions they may be applicable (combat versus nonhostile, stability operation or support operation; geographical differences; or event-triggered changes).

(4) Phased compliance. Describe in general terms the major environmental concerns and requirements during different phases of the operation. Specify transition tasks and measures and the appropriate initiating control measures.

b. Tasks to subordinate units. It will be unusual to have an entry here. If it is important enough to task a given maneuver element to accomplish an environmental task, this tasking must be identified in paragraph 3b of the base order. An example is the tasking of specific units (in conjunction with the surgeon or chemical officer) to perform environmental reconnaissance missions. If only placed here it is likely to be overlooked by the tasked unit. If including tasks to subordinate units:

(1) List functional area tasks that specific maneuver elements must accomplish and that the base OPORD does not contain.

(2) List functional area tasks the functional area units supporting maneuver elements must accomplish only as necessary to ensure unity of effort.

c. Coordinating Instructions. Outline key coordination that must be accomplished by two our more units and not routinely covered in unit SOPs. Pay particular attention to coordination requirements with higher HQs, Office of the Secretary of Defense (OSD), and other federal agencies. Unit responsibilities and requirements may vary according to location, activity, or phase of the operation; attach a matrix that specifies various levels of environmental protection. Environmental responsibilities of the surgeon and the logistics officer may be included here if not incorporated in their respective annexes.

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

(1) Environmental reconnaissance. Identify general responsibilities here.

(2) Environmental vulnerabilities. Specify general responsibilities for intelligence collection, identification, and response planning for environmental threats to mission success.

(3) Environmental assessments. List conditions under which environmental assessments may be required, conditions when assessments may be sensible even when not required by law or order, and responsibilities for conducting and approving assessments (See Tab A and B).

(4) Occupation of base camps and rear assembly areas. *(Occupation of base camps or rear assembly areas, and subsequent operations, will be accomplished incorporating environmental considerations whenever feasible and commensurate with the operational situation.)*

(a) An initial EBS (see Tab A) will be conducted to determine the preexisting condition of the site and its ecological resources. Direct the conduct of ECRs based on the duration of stay at a given site (to give interim snapshot condition reports) and in response to environmental incidents.

(b) Before departure or abandonment, units will perform a final EBS (see Tab A) to document the condition of the site to include water sources, soil, flora, archaeological/historical facilities, air quality, and other environmental conditions. Document the location of latrines, hazardous waste sites, landfills, hospitals, maintenance activities, POL storage, and any other environmentally-sensitive activities.

(5) Facilities.

(a) Environmental baseline surveys. Specify conditions, formats, responsibilities, and reporting of initial EBS, final EBS, and any interim ECRs (see Enclosures 1 and 2 and Tab C).

(b) Operating procedures. Provide guidance for environmental considerations and services in established facilities.

(c) Closure. Specify closure activities such as documentation of the location of latrines, HW sites, landfills, hospitals, maintenance activities, POL storage, and other environmentally-sensitive activities. Publication of these procedures may be delayed until a more appropriate phase of the operation.

(6) Construction. When planning and conducting general engineering operations, military designers should consider the project's effect on the environment as well as the applicable US and HN agreements, and applicable environmental laws and regulations. *(Soil erosion/runoff control procedures and other common sense procedures will be applied to the maximum extent possible in any case.)*

(7) Claims. *(Under the provisions of Article XXIII of the United States – Republic of Korea [US-ROK] SOFA, claims by local national individuals or organizations for damages arising from spills will be handled through established claims procedures.)*

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

4. SERVICE SUPPORT.

a. Identify those environmental planning factors which, although not mandated as law or regulation, will support successful execution of the OPLAN, OPORD, CONPLAN, or functional plan in all phases and protect the health and safety of US, allied forces, and noncombatants. As a minimum, address certification of local water sources by medical field units, solid and liquid waste management, HM management, flora and fauna protection, archaeological and historical preservation, and spill response. Disposal of solid and liquid waste will depend upon the location and surrounding environment of the disposal area. The intent is to minimize the environmental impact and to limit potential contamination to the holding site.

(1) Development, use, and protection of potable water sources. Certification of water sources includes: special considerations for the protection of surface water, groundwater, and water in distribution systems; location and special protection requirements for water and wastewater (gray water, see below) treatment facilities; disposal of effluents from showers and laundry facilities; disposal of brine water (or wastewater) from reverse osmosis water purification unit (ROWPU) operations. In CONUS, training exercises require a permit to discharge ROWPU brine into a water source. Returning brine (or wastewater) directly to the source, untreated, also violates the OEBGD. *(Water will be obtained or processed from approved sources. Water quality certifications will be accomplished according with procedures outlined in the 54th MECH DIV field standing operating procedures (FSOP). Operational and support elements will not contaminate potable water resources.)*

(2) Solid and liquid waste management. *(Disposal of solid and liquid wastes will be dependent on location and surrounding environment of the disposal area. The intent is to minimize the environmental impact and to limit potential contamination to the holding site.)*

(a) Solid waste. Requirements include: Disposal of solid waste (includes sludge); approval process for the use of landfills or incinerators; and protection of solid waste transportation, transfer, and disposal facilities. *(Solid waste will be removed and disposed of at ministry of environment approved facilities via wartime HN support agreements. In the absence of HN support, solid waste should be incinerated as the preferred method of disposal. Alternatively, burial of waste is acceptable and will employ the characteristics of landfill operations. Trenches will be perpendicular to the prevailing winds, deep enough to contain the long-term waste stream expected and to execute a daily cover of not less than 6 inches of earth, with a final cover of not less than 30 inches. Any trench will be properly marked when closed.)*

(b) Human waste. Handle storage and disposal of human waste in a way that best supports the mission and is most protective of human health. This factor is a particularly significant in densely populated areas where basic public health services may be disrupted, and standard field sanitation procedures are inadequate. *(Existing sanitary latrines, sewers, and treatment plants should be used to the maximum extent possible. If such facilities have exceeded their capacity or do not exist, human waste will be disposed of according to the operation and the situation encountered. The preferred methods of disposal in order of precedence are sanitary wastewater disposal systems, portable latrines, and slit trenches. Expeditionary sewage collection and disposal will be sited and operated to minimize environmental impact according to unit field sanitation procedures. If possible, do not conduct open burning upwind of populated areas. As a minimum, all slit trenches will be covered with not less than 24 inches of earth fill [12 inches of compacted fill level to the ground surface, and 12 inches of mound fill] before departure from the*

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

site. A sign showing the date of closure and the words "Closed Latrine" will be posted at each closed site.)

(c) Gray water. *(At locations that lack sewage treatment facilities, the preferred method of handling gray water will be by collection and proper disposal via wartime HN support. In the event these preferred options are not achievable during contingency operations or wartime, effluents from showers/ bathing facilities will be located downstream of water sources, both civilian and military. Most rivers in the Republic of Korea supply water to Korean populations, and gray water discharges into central waters are prohibited. Construction of temporary drainage facilities must ensure proper drainage of gray water runoff that precludes pooling. Measures will be taken to prevent creation of pest breeding sites.)*

(3) Medical waste. This section includes procedures and locations for storage and disposal of medical waste under normal and emergency conditions, as well as the responsibilities and procedures for approval of disposal methods. *(Disposal of medical waste will be according to guidelines established by the XX [US] Corps Surgeon. Should facilities be unavailable for permanent disposal, suitable temporary disposal should be accomplished through the use of a suitably labeled, segregated containment area. Wastes will be held in sealed containers or another appropriate manner that minimizes the release of biological contamination into the environment. A record will be made of the type, quantity, and location of the containment area. A copy of the report will be forwarded to the XX (US) Corps Staff Engineer Section and the Surgeon.)*

(4) HM/HW management.

(a) HW management. This section includes procedures and locations for the storage and disposal of HW under normal and emergency conditions, operations of the DRMO or approved contractor facilities, and the recording of abandoned HW sites. *(HW will be collected, packaged, and transferred to the DLA/DRMO when feasible according to guidelines established by the XX [US] Corps G4.) (If the operational situation dictates abandonment of HM/HW, consolidate, contain, and record the location of the items, type of items, and any other information that will facilitate future recovery operations. Forward a copy of the report to both the XX [US] Corps Staff Engineer Section and G4.)*

(b) HM management. *(HMs will be stored, transported, and used according to established procedures and in a manner that precludes improper human or ecological exposure. To the extent practical, consolidation and reutilization will be applied to reduce the amount of HM expended and waste generated.)*

(c) Abandonment. *(If the operational situation dictates abandonment of hazardous material/waste; consolidate, contain, and record the location of the items, type of items, and any other information that will assist future recovery operations. Forward a copy of the report to both the XX [US] Corps Staff Engineer Section and G4.)*

(d) Spill prevention/control procedures. *(Commanders will maintain spill-prevention/control plans with battalion level spill response teams, according to the 54th MECH DIV FSOP. Units will take immediate action to contain the spill, clean up the site to the limit of their capability, mark the site, and report the spill through their chain of command to the XX [US] Corps Staff Engineer Section, PAO, and G4. The spill report should be in basic ECR format [see Tab B] and at a minimum contain the location, type and quantity of contaminant[s], status of the clean up, and an estimate of additional resources required to complete the clean up.)*

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

(5) Ecosystem protection. Protect special flora and fauna, wetlands, forests, and croplands, and seek approval for the clearing of large areas and approved methods and chemicals, if any, for clearing. *(The requirement to clear fields of fire [as well as limited clearance for health, safety, and troop welfare] may cause the destruction of ecosystems. Destruction and clearing of areas in excess of 100 acres requires the approval of Commander, XX [US] Corps.)*

(6) Air and noise emissions. Give special consideration to preventing air and noise emissions—normally confined to theater rear areas or to security, support, or humanitarian missions. *(Generators will be operated only in the reduced sound signature mode as defined in 54th MECH DIV FSOP…Movement of tracked vehicles outside of designated assembly areas, from 0001-2400 on Sundays during this exercise, is prohibited without permission of Commander, XX [US] Corps.)*

(7) Archaeological and historical preservation. State the requirements to minimize damage to historical sites and buildings, monuments, and works of art. A separate overlay may be required. *(Operational activities that adversely impact on archaeological and historic sites and buildings are to be minimized. If damage occurs, a report of circumstances will be made through operational channels to XX [US] Corps Civil Affairs and the PAO.)*

b. Logistics. Address any necessary guidance for administering the environmental effort by the commander. Provide guidance for logistic support to environmental support and compliance.

(1) HM management. Specify unique control measures used in supply, storage, transportation, and retrograde to reduce and regulate the use of HM.

(2) Environmental considerations and services locations. Provide, when appropriate, the location of landfills, incinerators, HW collection facilities, water and wastewater treatment plants, watershed protection areas, ecologically-sensitive areas, contaminated areas, potentially dangerous industrial facilities, and other points of environmental sensitivity or interest to the command. Include cultural resources if not noted elsewhere.

5. COMMAND AND SIGNAL.

a. Command. Identify the executive agent for environmental functions in the command and CP location. Specify responsibilities and levels for issuing guidance and waivers.

b. Signal. List environmental reporting instructions not specified in unit SOPs; identify the required reports, formats, times and distribution lists.

NAME (An appendix can be signed by either the commander or primary staff officer.)

RANK

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

Tabs:

A. Environmental Assessments

B. Environmental Assessment Exemptions

C. Environmental Baseline Survey

D. Base Camp Closure Standards (TBP)

E. Electronic Environmental Report Message Formats

CLASSIFICATION

Figure B-1. Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

TAB A (ENVIRONMENTAL ASSESSMENTS) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References:

a. DODD 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," 31 March 1979.

b. JSI 3820.01, "Environmental Engineering Effects of DOD Actions," 28 September1993.

c. JCS Pub 4-04, "Joint Doctrine for Civil Engineering Support," 26 September 1995.

d. DODD 6050.16, "Policy for Establishing and Implementing Environmental Standards at Overseas Installations," 20 September 1991.

e. Applicable country-specific FGS.

f. DOD OEBGD, or in-theater equivalent, October 1992.

g. Civil Engineering Support Plan (CESP), in AOR.

1. Purpose. State the regulatory, legal, troop protection, financial, or other reason for conducting an environmental assessment in conjunction with the supported operation.

2. Background. State the purpose and concept of the operation and a brief explanation of the relationship of environmental assessments to the successful completion of the operational mission.

3. Description of the Actions. State the types of assessments and the conditions under which actions are required. When "major actions" (defined in Reference A) are included in the operation, indicate whether an exemption applies (Tab B of this appendix). If no exemption is being invoked, state the type of assessment(s) to be prepared: environmental impact statement (EIS), environmental statement (ES), or environmental report (ER) (see Reference A). Indicate requirements for a facility EBS.

4. Exemption or Exclusion. Describe the basis for exemption (Tab B of this appendix). Finally, determine and document the applicability to the operation. Seek approval from a higher authority according to Reference A if applicability is not clearly stated.

5. Analysis of Options or Alternatives. If an ER, ES, or EIS is required, document the actions and alternatives that were considered in planning the supported operation to minimize environmental impact.

CLASSIFICATION

Figure B-2. Tab A (Environmental Assessments) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

6. Environmental Setting of the Operation. (This and the following paragraphs are useful for scoping/tiering analyses.) Describe or provide references for the description of the general environmental conditions of the operational area, including (a) vegetation, (b) climate, (c) wildlife, (d) archeological and historic sites, (e) water quality, and (f) air quality.

7. Environmental Impact of the Operation. Describe the impact on the (a) topography, (b) vegetation, (c) water quality, (d) air quality, (e) ecosystem functioning, (f) archeological and historical sites, (g) wildlife, (h) socio-economic and political end state, (i) land use, (j) safety and public and occupational health, and (k) HM and HW use and disposal.

8. Mitigation and Monitoring.

(a) Requirements. Describe actions and assign responsibilities for mitigation and monitoring of environmental impacts of the supported operation (see Reference C, Chapter II, paragraph 4).

(b) Compliance Responsibilities. State applicability and responsibility for implementation of the OEBGD or FGS during the post-hostilities phase. (See Reference D for assistance.)

CLASSIFICATION

Figure B-2. Tab A (Environmental Assessments) to Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

TAB B (ENVIRONMENTAL ASSESSMENT EXEMPTIONS) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References:

a. DODD 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," 31 March 1979.

b. Joint staff instruction (JSI) 3820.01, "Environmental Engineering Effects of DOD Actions," 28 September 1993.

1. Purpose. State the basis for invoking or requesting an exclusion or exemption from environmental assessment, according to Reference A, for the supported operation.

2. Background. State facts identified in the planning process which support an exemption from the requirement of environmental analysis and documentation.

3. Discussion. Provide factual rationale for invoking an exemption. Assign responsibility for making exemption determination.

4. Determination. Identify and document the authority making the exemption determination.

CLASSIFICATION

Figure B-3. Tab B (Environmental Assessment Exemptions) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

TAB C (ENVIRONMENTAL BASELINE SURVEYS [EBS]) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References:

a. DODD 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," 31 March 1979.

b. JSI 3820.01, "Environmental Engineering Effects of DOD Actions," 28 September 1993.

1. Purpose. The primary purpose of an EBS is to identify environmental, health, and safety conditions that pose a potential health threat to military personnel and civilians that occupy properties used by the US military in the TO. The secondary purpose is to document environmental conditions at the initial occupancy of property to prevent the US from receiving unfounded claims for past environmental damages.

2. EBS Requirement. State the requirement for performing an EBS, the time by which the initial EBS is to be completed, and responsibilities for conducting and reporting.

3. Applicability. Describe conditions under which the EBS is required or may be waived.

4. Description. EBSs are divided into initial and closure investigations. The initial investigation is designed to provide an initial overview of the property using real-time field sampling. The initial investigation is updated when there are indications of the potential for significant environmental or health hazard and involves a more comprehensive analysis designed to quantify an identified hazard. Comprehensive analysis requires more time when it uses more specialized equipment that may not be available to all survey teams. The closure EBS is a part of base-camp closure standards but is not limited to base camps (logistics areas, communications sites, airfields, staging areas). To effectively complete the closure report it is essential to reference the initial EBS (and update if applicable) and the log of periodic environmental conditions report(s) (ECRs) that have been completed on the particular site/area. The ECR is completed on a periodic basis to document conditions at the site/area as well as any time a potentially significant environmental event occurs. See Enclosure 2 of this tab for an example. This description identifies the protocol to be used in conducting both the initial and closure EBSs. This may include a checklist from a theater regulation or environmental compliance assessment or some other means of guidance. Also address the frequency of ECRs and what constitutes a "significant environmental event."

5. Support. List military or contractual support for conducting an EBS. This list may include training for unit officers, preventive medicine personnel, chemical reconnaissance platoons, Logistics Civil Augmentation Program (LOGCAP), and Corps of Engineers support.

6. Reporting. Describe report formats, reporting chain, and disposition.

Enclosures:

1. Environmental Baseline Survey
2. Environmental Conditions Report
3. Maps, Photographs, and Digital Data

CLASSIFICATION

Figure B-4. Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

ENCLOSURE 1 (ENVIRONMENTAL BASELINE SURVEY [EBS]) TO TAB C (ENVIRONMENTAL BASELINE SURVEYS) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References:

a. DODD 6050.7, 31 March 1979, "Environmental Effects Abroad of Major DOD Actions."

b. JSI 3820.01, 28 September 1993, "Environmental Engineering Effects of DOD Actions."

c. DODD 6050.16, 20 September 1991, "Policy for Establishing and Implementing Environmental Standards at Overseas Installations."

d. Other applicable environmental laws and regulations.

e. Command guidance references.

f. For a closure EBS, the initial EBS (and any applicable update) and any ECRs are also reference documents.

1. Site/Property Location. List the legal address and 6-digit military grid location or latitude and longitude.

2. General Site Setting. Note whether the site was visually observed or identified from interviews or record reviews. For an updated initial EBS or a closure EBS, the site should always be visually observed.

a. The methodology used and limitations encountered during the initial (or updated) site reconnaissance or the closure inspection. Describe the method used to reconnoiter the property; for example, the use of grid patterns or other systematic approach. List and describe any limitations encountered during the reconnaissance such as physical obstructions, bodies of water, pavement, weather, or uncooperative occupants.

b. The current uses of the property. Be as specific as possible.

c. The past uses of the property. List all known past property uses. If a past use is likely to have involved the use, treatment, storage, disposal, or generation of HMs or petroleum products, include a detailed description or indicators of this use. A closure EBS includes information obtained from ECRs as well.

d. Current uses of adjoining properties. Be as specific as possible.

e. Past uses of adjoining properties. If a past use is likely to have indicated recognized adverse environmental conditions, include a detailed description.

CLASSIFICATION

Figure B-5. Enclosure 1 (Environmental Baseline Survey) to Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

f. Current or past uses of the surrounding areas: list general types of past uses; for example, residential, agricultural, or industrial. Limit surroundings to that which can be seen or would clearly affect the area, such as upstream on a waterway.

g. Geologic, hydrogeologic, hydrologic, or topographic conditions. List the conditions and give a general description of the topography in the area. If indicated, analyze the likelihood of contaminant migration on or to the property through the soil or groundwater from the adjacent properties or the surrounding areas.

h. General description of structures. List the buildings, and their locations, size, basic construction type, stories, and approximate age.

i. Roads. List all public thoroughfares adjoining the property and describe all roads, streets, parking areas, and walkways.

j. Water supply. List and differentiate all sources of potable and nonpotable water.

k. Sewage disposal system. Describe sewage disposal systems on the property and their general condition, and approximate age.

3. Interior and Exterior Observations. To the extent visually/physically observed or identified from interviews or record reviews (list actual source).

a. HM and petroleum products. Describe uses and types of products used on the property, and the approximate amount and storage conditions. Indicate if treatment, storage, disposal, or generation occurred on the property.

b. Storage tanks. Describe size, location, condition, and approximate age of all above and below-ground storage tanks.

c. Odors. Describe any noticeable odors and their source.

d. Pools of liquid. Note all surface water and describe all pools or sumps that contain water or other liquids that may contain HM.

e. Drums. Describe all drums and their conditions. If they are known to contain no HM, list contents only.

f. Hazardous substances and petroleum products. Describe all products to include type, amount, and manner/condition of storage.

g. Unidentified substance containers. Describe any open or damaged containers suspected of containing HM or petroleum products.

h. PCBs. Include a description of electrical or hydraulic equipment likely to contain PCBs.

CLASSIFICATION

Figure B-5. Enclosure 1 (Environmental Baseline Survey) to Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

i. Interior observations of the following:

(1) Heating and cooling systems. Describe, to include the fuel source and amount on hand.

(2) Stains and corrosion. Describe stains on floors, walls, and ceilings.

(3) Drains and sumps. Describe floor drains and sumps.

j. Exterior observations of the following:

(1) Pits, ponds, and lagoons. Describe the pit, pond, or lagoon, especially if it may have been used for HW disposal or waste treatment. Include a discussion and description of any on adjacent or adjoining properties as well.

(2) Stained soil or pavement. Describe any stained soil or pavement.

(3) Stressed vegetation. Describe any stressed vegetation and probable cause.

(4) Solid waste. Describe any filled, graded, or mounded areas that would suggest the disposal of trash or solid waste.

(5) Wastewater. Describe every discharge of a liquid into a stream or ditch that is adjacent to the property.

(6) Wells. Locate and describe all wells (monitoring, potable, dry, irrigation, injection, abandoned, etc.) on the property.

(7) Septic systems. List indications or the existence of on-site septic systems or cesspools.

(8) Ambient air quality. Smog, smoke, and odors from industrial facilities and many HW products can be detected easily. Terrain can also affect air quality. Mountains and canyons can cause temperature inversions, which impact air quality. Setting up base camps with heating units and vehicles in an area prone to temperature inversions can cause poor air quality. Prevailing winds should also be considered.

(9) Unexploded ordnance. Identify and ensure clearance before occupation.

4. Deletions and Deviations. Describe all deviations or deletions from the protocol (checklist) used or the environmental standards currently in use by the command. Discuss each one individually and in detail.

5. Findings and Conclusions Statement. List the protocol used for the survey, exceptions to the protocol, and any evidence of recognized adverse environmental conditions.

6. Qualification Statement. List the qualifications and duty position(s) of the individual(s) preparing the EBS.

CLASSIFICATION

Figure B-5. Enclosure 1 (Environmental Baseline Survey) to Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

ENCLOSURE 2 (ENVIRONMENTAL CONDITIONS REPORT [ECR]) TO TAB C (ENVIRONMENTAL BASELINE SURVEYS) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References:

a. DODD 6050.7, "Environmental Effects Abroad of Major Department of Defense Actions," 31 March 1979.

b. JSI 3820.01, "Environmental Engineering Effects of DOD Actions," 28 September 1993.

c. DODD 6050.16, "Policy for Establishing and Implementing Environmental Standards at Overseas Installations," 20 September 1991.

d. Other applicable environmental laws and regulations, OPORD, and unit SOP.

e. Site specific EBS (if applicable).

f. Electronic Environmental Message Formats in Tab E.

1. Site/Incident Location. List the legal address and 6-digit military grid location or latitude and longitude of the incident location or reference the applicable EBS to link the ECR to a given site. Refer to the electronic environmental message formats at Tab E. (The ECR functions as a situation report (SITREP), or interim report, for a given site. The frequency of ECR reports is a higher headquarters' decision but supports the need to document the condition of a given site over time [interim snapshots], as well as helping to ensure that an appropriate environmental focus is being maintained at a given site. The basic format of the ECR may also be used when reporting an incident, such as a POL spill, not related to a given EBS or site location.)

2. Site/Incident Description and Background. Give a brief description of the site (installation), including its related EBS/historical use(s) or the circumstances surrounding the incident. For an incident at a location not covered by an EBS, it is critical to provide the same sort of information contained in a standard accident report.

3. Map/Description of the Incident Location. If the ECR is related to a site covered by an EBS, this entry is able to relate to the information already provided in the EBS (a baseline document). If the ECR defines a location where an incident has occurred that is not covered by an EBS, the description needs to be adequate to direct a follow-on element to the site. In this respect, it is similar to the graves-registration report if the incident occurs during a tactical operation where time precludes remaining at the site.

4. Summary of Environmental Conditions. List the environmental event(s) at the site/location. All spills should be inventoried. If the ECR is a periodic report for a given site, significant events, such as major spills, should have been reported using the basic ECR format. In this case, simply reference any significant incident report ECRs that may have occurred at the given site over the time frame that the periodic ECR covers. Also provide a "snapshot" report of the types of HW/HM that are stored at the site. Describe minor spills and other events that have occurred over the time frame in question in basic terms, including quantities and the method(s) used to clean the site.

CLASSIFICATION

Figure B-6. Enclosure 2 (Environmental Conditions Report) to Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

Example: Four gallons of waste oil spilled at the hazardous waste accumulation site (HWAS) located northwest of the maintenance building (shown on map) at 1600 hours on 16 December 2000. The 22nd Military Police Battalion (MP Bn), contained the spill with assistance by White & Jones, by 1725 hours. About 3 cubic yards of contaminated soil was taken to the White & Jones HW disposal area in Juvonia.

Example: Raw sewage ran from a pump house behind the main warehouse (shown on map) for an estimated 3 days during the initial stages of occupying the camp in early June 2000. The problem was identified on 13 June and corrected when the pump was repaired on 14 June.

Example: A fuel tanker overturned at the road intersection vicinity NV 123456 (see map) at 092000 November 2000 during the road march to Bigtown. Immediate mitigation included spill containment by the employment of all available spill kits with the unit. Higher HQ was immediately notified. An estimated 4000 gallons of jet petroleum (JP)-8 spilled at that site. The vehicle has been righted, and excavation of the site will begin at first light, 10 November.

5. Interior and Exterior Observations. These entries should be viewed as an abbreviated version of the information that would be found in an EBS. Items should only be addressed if they differ from the last ECR or vary from the initial EBS.

6. Findings and Determinations with Qualification Statement. A statement similar to the following should appear in this paragraph of the ECR:

According to _____ Reg _____, I have considered whether or not significant environmental impacts will occur as a result of turnover/return of this site (base camp, logistics area) and have determined that (include one of the following statements):

a. Turnover of this base camp area will not result in environmental impacts significant enough to warrant additional environmental analysis.

OR

b. Turnover of this base camp area will result in environmental impacts significant enough to warrant additional environmental analysis. Environmental actions or projects must continue after transfer of the base camp area because of substantial (imminent) threat to human health or safety. The impacts of concern are (list impacts):

(If the report is due to an incident not connected to a specific site/installation, this paragraph is an assessment by the commander/individual on the scene.)

John Q. Jones
MAJ, QM
Mayor, Camp Swampy

CLASSIFICATION

Figure B-6. Enclosure 2 (Environmental Conditions Report) to Tab C (Environmental Baseline Surveys) to Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)

CLASSIFICATION

TAB E (ELECTRONIC ENVIRONMENTAL MESSAGE FORMATS) TO APPENDIX 2 (ENVIRONMENTAL CONSIDERATIONS) TO ANNEX F (ENGINEER) TO 54TH MECH DIV OPLAN 99-7 (U)

References: FM 101-5-2, "US Army Reports and Message Formats," 29 June 1999.

1. ( ) ECR Format.

TITLE: ENVIRONMENTAL CONDITION REPORT (ECR)
REPORT NUMBER: E035

GENERAL INSTRUCTIONS: Used to send periodic information (interim snapshots) of the environmental status of specific sites (assembly areas, base camps, logistical support areas, and medical facilities) where hazards are likely to occur and can result in significant, immediate and/or long-term effects on the natural environment and/or health of friendly forces and noncombatants. Sent in accordance with unit SOP and commander's direction.

LINE 1—DATE AND TIME _____	(Date-time Group [DTG])
LINE 2—UNIT _____	(Unit making report)
LINE 3—LOCATION _____	(universal traverse mercator [UTM] or six-digit grid coordinate with MGRS grid zone designator of site/incident)
LINE 4—DESCRIPTION _____	(Description of site/incident)
LINE 5—CHANGES_____	(Changes from last ECR or EBS)
LINE 6—HAZARDS _____	(Hazards to natural environment, friendly forces, and/or civilian personnel)
LINE 7—ACTIONS _____	(Summary of actions to minimize hazards/remedial effects)
LINE 8—UNIT POC _____	(Reporting unit point of contact)
LINE 9—ASSISTANCE _____	(Assistance required/requested)
LINE 10—REFERENCE _____	(Site specific EBS, if required)
LINE 11—NARRATIVE _____	(Free text for additional information required for clarification of report)
LINE 12—AUTHENTICATION_____	(Report authentication)

CLASSIFICATION

Figure B-7. Tab E (Electronic Environmental Message Formats) to Appendix 2 (Environmental Considerations) to Annex F (Engineer)

CLASSIFICATION

2. ( ) Electronic Spill Report Message Format.

TITLE: SPILL REPORT (SPILLREP)
REPORT NUMBER: S055

GENERAL INSTRUCTIONS: Used to send timely information or status of an oil, hazardous material, or hazardous waste spill that could have immediate environmental and/or health effects. Sent in accordance with SOP and commander's direction. **NOTE:** Spill reporting and reportable quantities are mandated by federal and local law.

LINE 1—DATE AND TIME _____(DTG)

LINE 2—UNIT _____(Unit making report)

LINE 3—DATE/TIME _____(DTG of spill discovery)

LINE 4—MATERIAL _____(Material spilled)

LINE 5—QUANTITY _____(Quantity of spilled material)

LINE 6—LOCATION _____(UTM or six-digit grid coordinate with MGRS grid zone designator of spill)

LINE 7—CAUSE _____(Cause and supervising unit)

LINE 8—SIZE _____(Size of affected area)

LINE 9—DAMAGE _____(Damage to the natural environment, if required)

LINE 10—HAZARDS _____(Hazards to natural environment, friendly forces, and/or civilian personnel)

LINE 11—ACTIONS _____(Summary of actions taken)

LINE 12—UNIT POC _____(Supervising unit POC)

LINE 13—ASSISTANCE_____(Assistance required/requested)

LINE 14—NARRATIVE_____(Free text for additional information required for clarification of report)

LINE 15—AUTHENTICATION _____ (Report authentication)

CLASSIFICATION

Figure B-7. Tab E (Electronic Environmental Message Formats) to Appendix 2 (Environmental Considerations) to Annex F (Engineer) (continued)